

IN THE CLAIMS

1. (Original Claim) A method of processing waste comprising the steps of:
 - gathering said waste into a stream of collected waste;
 - composting said collected waste in a composting vessel and obtaining a composted discharge therefrom;
 - dividing said composted discharge into a large particle stream and a small particle stream;
 - removing materials of value from said large particle stream and said small particle stream;
 - combining said large and small particle streams after said removing step into a combined particle stream;
 - extracting any remaining materials of value from said combined particle stream;
 - grinding all materials in said reduced combined particle stream to create a ground particle stream; and
 - screening said ground particle stream and collecting compost therefrom.
2. (Original Claim) The method of Claim 1 wherein said dividing step includes the step of passing said composted discharge through a screening apparatus, materials passing through said screening apparatus becoming said small particle discharge while materials being discharged from said screening apparatus without passing therethrough becoming said large particle stream.
3. (Original Claim) The method of Claim 2 wherein said step of removing materials of value from said large particle stream and said small particle stream comprises the steps of:
 - freeing light materials from said large particle stream;
 - attracting ferrous materials out of both said large particle stream and said small particle stream;

separating aluminum materials from both said large particle stream and said small particle stream; and

collecting plastic materials from said large particle stream.

4. (Original Claim) The method of Claim 3 said step of attracting ferrous materials includes the step of passing said large particle stream and said small particle stream through respective magnetic devices that attract ferrous materials to a location removed from the respective said particle stream.

5. (Original Claim) The method of Claim 3 wherein said step of freeing light materials includes the step of utilizing an air classifier on said large particle stream after being discharged from said screening apparatus.

6. (Original Claim) The method of Claim 3 wherein said step of separating aluminum materials includes the step of passing said large particle stream and said small particle stream through respective eddy current mechanisms.

7. (Original Claim) The method of Claim 6 wherein said separating step for said large particle stream occurs after said freeing step.

8. (Original Claim) The method of Claim 3 wherein said step of collecting plastic materials includes the step of passing said large particle stream through a pneumatic plastic sort system after said freeing step.

9. (Original Claim) The method of Claim 8 wherein said attracting step, said freeing step and said separating step are accomplished on said large particle stream before said collecting step.

10. (Original Claim) The method of Claim 3 wherein said step of extracting any remaining materials of value from said combined particle stream includes the steps of:

attracting remaining ferrous materials out of said combined particle stream; and
withdrawing all remaining large particles from said combined particle stream to
create a reduced combined particle stream.

11. (Original Claim) The method of Claim 10 wherein said step of attracting remaining ferrous materials includes the step of directing said combined particle stream into a rotary magnetic drum pulley which attracts any remaining ferrous materials in said combined particle stream to a remote location.

12. (Original Claim) The method of Claim 11 wherein said step of attracting remaining ferrous materials and said step of combining said large and small particle streams are accomplished simultaneously by the step of directing both said large and small particle streams simultaneously into said rotary magnetic drum pulley the discharge from which creates said combined particle stream.

13. (Original Claim) The method of Claim 10 wherein said step of withdrawing all remaining large particles includes the step of passing said combined particle stream through a screening apparatus, the materials passing through said screening apparatus creating said reduced combined particle stream, the materials discharged from said screening apparatus without passing therethrough being collected at a remote location.

14. (Original Claim) The method of Claim 3 wherein said step of screening said ground particle stream includes the step of passing said ground particle stream through a multi-stage vibratory screen which will sort the materials in said ground particle stream by size.

15. (Original Claim) The method of Claim 3 further comprising the step of:
shredding said stream of collected waste before said composting step.
16. (Original Claim) A method of processing waste comprising the steps of:
gathering said waste into a stream of collected waste;
shredding said stream of collected waste to create a stream of shredded waste materials;
loading said shredded waste materials into a steam pressure vessel to disintegrate said shredded waste material and to destroy pathogens in said shredded waste material, thereby creating a disintegrated stream of waste material;
dividing said disintegrated stream of waste material into a large particle stream and a small particle stream;
creating a stream of overs from said large particle stream by removing materials of value from said large particle stream;
further processing said stream of overs to create a fine material stream and a large material stream;
composting materials in said small material stream and in said fine material stream within a composting vessel and obtaining a composted discharge therefrom;
grinding all materials in said composted discharge to create a ground particle stream; and
screening said ground particle stream and collecting compost therefrom.
17. (Original Claim) The method of Claim 16 wherein said step of further processing said stream of overs includes the steps of:
shredding materials within said stream of overs to reduce the size of said materials to a predetermined maximum size;
then, creating a reduced stream of overs by the steps of:
extracting ferrous materials from said stream of overs;

separating aluminum materials from said stream of overs; and
collecting plastic materials from said stream of overs;
then, screening said reduced stream of overs to create a first fine material stream
and a first large material stream;
then, grinding said first large material stream to create a ground large material
stream;
then, further screening said ground large material stream to create a second fine
material stream and a final large material stream; and
directing said first and second fine material streams to said composting vessel for
said composting step.

18. (Original Claim) The method of Claim 17 wherein said final large material stream is fed
into a gasifier to create heat energy for operation of said steam pressure vessel.

19. (Original Claim) The method of Claim 18 wherein said dividing step includes the step of
passing said disintegrated stream of waste material into a screening apparatus, said first and
second fine material streams being added to said screening apparatus with said disintegrated
stream of waste material to pass therethrough and be directed to said composting vessel.

20. (Original Claim) The method of Claim 16 wherein said step of creating a stream of overs
includes the steps of:

extracting ferrous materials from said large particle stream;
separating aluminum materials from said large particle stream; and
collecting plastic materials from said large particle stream.